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EXAMINER
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ART UNIT	PAPER NUMBER
184	4

DATE MAILED: 05/21/91

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 03 November 89 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire THREE (3) month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input checked="" type="checkbox"/> Notice re Patent Drawing, PTO-948.       |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. <u>2062</u> | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.            | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-19 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-19 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

The specification and claims should be reviewed for spelling, grammatic, and typographic error.

35 U.S.C. § 101 reads as follows:

5 "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

10 Claims 1-11 and 16-19 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

15 Naturally occurring FMV and infected plants comprise the recited elements of the promoter and terminator in these claims. "Fragment comprising" is open language and the construct is not recombinant. The invention as claimed, therefore, does not constitute patentable subject matter. See American Wood v Fiber Disintegrating Co., 90 U.S. 566 (1974); American Fruit Growers v. Brogdex Co., 283 U.S. 1 (1931); Funk Brothers Seed Co. v. Kalo Inoculant Co., 33 U.S. 127 (1948); Diamond v. Chakrabarty, 206  
20 USPQ 193 (1980).

25 Claims 2-4, 8-10, and 13-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The position of the TATTAA site is not indicated in claims 2-4 and 8-10. The elements recited in claims 13-15 are not oriented with respect to the elements in claim 5. Claim 14 appears to have added a second CaMV 35S promoter to that of claim 13.

Claim 7 is rejected under 35 U.S.C. § 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The identity or position of the functional 34S termination region of claim 7 is not specified and the specification sheds no light on this issue.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 16 are rejected under 35 U.S.C. § 102(a) as being clearly anticipated by Gowda et al.

Claims 1-11 and 16 are rejected under 35 U.S.C. § 102(a) as being clearly anticipated by Wu et al.

Claims 1-11 and 16-17 are rejected under 35 U.S.C. § 102(a) as being clearly anticipated by Goldberg et al.

Claims 1-11 and 16-19 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Shepherd et al.

Claims 1-11 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Richins et al.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

5 A patent may not be obtained though the invention is not  
identically disclosed or described as set forth in section  
102 of this title, if the differences between the subject  
matter sought to be patented and the prior art are such that  
the subject matter as a whole would have been obvious at the  
10 time the invention was made to a person having ordinary  
skill in the art to which said subject matter pertains.  
Patentability shall not be negatived by the manner in which  
the invention was made.

15 Subject matter developed by another person, which qualifies  
as prior art only under subsection (f) or (g) of section 102  
of this title, shall not preclude patentability under this  
section where the subject matter and the claimed invention  
were, at the time the invention was made, owned by the same  
person or subject to an obligation of assignment to the same  
person.

20 This application currently names joint inventors. In  
considering patentability of the claims under 35 U.S.C. § 103,  
the examiner presumes that the subject matter of the various  
claims was commonly owned at the time any inventions covered  
therein were made absent any evidence to the contrary. Applicant  
25 is advised of the obligation under 37 C.F.R. § 1.56 to point out  
the inventor and invention dates of each claim that was not  
commonly owned at the time a later invention was made in order  
for the examiner to consider the applicability of potential 35  
U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

30 Claims 1-19 are rejected under 35 U.S.C. § 103 as being  
unpatentable over Shah et al and Sanders et al taken with either  
Richins et al or Gowda et al or Wu et al or Goldberg et al.

35 The primary references disclosed all features of the present  
invention except for specifying FMV 34S gene as a source for a  
strong promoter. The secondary references disclosed the FMV 34S  
promoter which was analogous in structure and strong expression  
characteristics with the well-known CaMV 35S promoter long used

in recombinant constructs in transgenic plants. At the time this invention was made, it was obvious to one of ordinary skill in the art to modify the primary references with the teachings of the secondary references with a reasonable expectation of success as taught by Wu et al for example. Thus the invention as claimed was very clearly prima facie obvious as a whole over the prior art in the absence of clear and convincing evidence to the contrary.

No claim was allowed.

Any inquiry concerning this communication should be directed to P. Rhodes at telephone number (703) 308-0196.

*Elizabeth C. Weimar*  
ELIZABETH C. WEIMAR  
SUPERVISORY PATENT EXAMINER  
ART UNIT 184

*PRR*  
P. Rhodes  
April 23, 1991